



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION  
CITY VIEW PLAZA, SUITE 7000  
#48 165 RD. KM 1.2  
GUAYNABO, PR 00968-8069

NOV 30 2012

**CERTIFIED MAIL-RETURN RECEIPT REQUESTED**

**Article Number: 7009 2250 0000 9163 4068**

Irma López  
Acting Director  
Compliance and Quality Control Directorate  
Puerto Rico Aqueduct and Sewer Authority  
P.O. Box 7066  
San Juan, Puerto Rico 00916-9990

**Re: Reconnaissance Inspection  
Guánica Wastewater Treatment Plant  
NPDES Permit Number PR0020486**

Dear Mrs. López:

On November 15, 2012, the United States Environmental Protection Agency (EPA) conducted a Reconnaissance Inspection (RI) at the Guánica Wastewater Treatment Plant. The purpose of the inspection was to assess PRASA's operational and maintenance practices at the facility.

Enclosed you will find a copy of the Water Compliance Inspection Report, which summarizes our findings during the CEI. Within forty five (45) calendar days of receipt of this letter, please respond with the actions PRASA has taken or will be taken to address the findings of the inspection.

Should you have any questions, feel free to contact me or Miguel A. Batista of my staff at (787) 977-5823.

Cordially,

Jaime A. Géliz  
Chief  
Municipal Water Programs Branch  
Caribbean Environmental Protection Division

Enclosure

cc. Roberto Ayala, EQB  
Juan C. Perez, PRASA  
David Velázquez, PRASA  
Nashaly Berrios, PRASA  
Bruce León, PRASA



United States Environmental Protection Agency  
Washington, D.C. 20460  
**Water Compliance Inspection Report**

Form Approved.  
OMB No. 2040-0057  
Approval expires 8-31-98

**Section A: National Data System Coding (i.e., PCS)**

Transaction Code	NPDES	yd/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5 3 P R 0 0 2 0 4 8 6 11 12 1 2 1 1 1 5 17 18 R 19 R 20 1					
Remarks					
2					
Inspection Work Days Facility Self-Monitoring Evaluation Rating 81 QA Reserved					
6 2 0 69 70 1 71 72 73 74 75 80					

**Section B: Facility Data**

Name and Location of Facility Inspected (for industrial users discharging to POTW, also include name and NPDES permit number)	Entry Time/Date	Permit Effective Date
GUÁNICA WASTEWATER TREATMENT PLANT YAGUER ST. Guánica, P.R. 00653	9:30 am 11/15/2012	12/01/2008
	Exit Time/Date	Permit Expiration Date
	11:30 am 11/15/2012	11/30/2013
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data	
787-821-2865 See attached report for on-site representative		
Name, Address of Responsible Official/Title/Phone and Fax Number(s)		
Julio V. Pérez, Executive Regional Director PRASA South Region		
Contacted <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

**Section C: Areas Evaluated During Inspection (Check only those areas evaluated)**

<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Operations & Maintenance	CSO/SSO (Sewer Overflow)
<input checked="" type="checkbox"/> Records/Reports	<input checked="" type="checkbox"/> Self-Monitoring Program	<input checked="" type="checkbox"/> Sludge Handling/Disposal	Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	Compliance Schedules	Pretreatment	Multimedia
<input checked="" type="checkbox"/> Effluent/Receiving Water	Laboratory	Storm Water	Other: Pump Stations

**Section D: Summary of Findings/Comments (Attach additional sheets of narrative and checklists as necessary)**

See attached report for findings.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
 Miguel A. Batista, Environmental Engineer	CEPD-MWPB (787) 977-5823 (ph) ; (787) 289-7104 (fax)	11/30/12
Signature of Management QA Reviewer	Agency/Office/Phone and Fax Numbers	Date
 Jaime A. Géliz, Chief Municipal Water Programs Branch	CEPD-MWPB (787) 977-5840 (ph) ; (787) 289-7104 (fax)	11/30/12

**Summary of Findings/Comments  
Water Compliance Inspection Report Form  
(EPA Form 3560-3)**

**RECONNAISSANCE INSPECTION**

Facility Name: Guánica WWTP  
NPDES Permit Number: PR0020486  
PRASA Representative: Axel Rivera, Plant Operator  
Jose Bosa, Plant Supervisor

**I. BACKGROUND**

A Reconnaissance Inspection (RI) was conducted on November 15, 2012 at the Guánica WWTP. The RI consisted of an opening interview to discuss the purpose of the inspection and to request information about the facility. A walk through the plant was performed to evaluate its operational conditions. Also, a grab sample of the effluent was collected to evaluate the appearance of the discharge at the time of the inspection.

**II. PLANT OPERATION AND MAINTENANCE**

The Guánica WWTP consists of two treatment modules. One module is a 0.5 MGD activated sludge conventional package plant (Old Plant) and the second module is a 1.25 MGD Biological Nutrient Removal (BNR) treatment plant (New Plant). At the time of the inspection the BNR module was not in operation.

At the time of the inspection, Mr. Axel Rivera was acting as Plant Operator for the Guánica WWTP. Mr. Rivera has obtained the certification as a Wastewater Treatment Plant Operator Level IV # 2122 which expires on April 22, 2014.

**III. FACILITY SITE REVIEW – SUMMARY OF FINDINGS**

- A. Equipment and/or treatment units identified in poor operational conditions during a previous Compliance Evaluation Inspection (CEI) conducted on May 17, 2012; were identified and verified at the time of the RI, and are summarized in the following table:

<b>Findings May 17, 2012 CEI</b>	<b>Findings November 15, 2012 RI</b>
1) The facility has two (2) Pista type grit removal systems. Both units were in stand-by mode, but in operable condition. According to the operator, these units are not in use because they need to be cleaned. Work Order (WO) # 10091899 for unit # 1 was completed on April 2, 2012. Work Order # 10091639 was completed on February 8, 2012 for unit # 2. In addition, it was observed that the transmission of both units had vibration. There was no WO # for this finding.	Both units were cleaned on May 31, 2012. It was documented on the Operator's Log Book, but with the WO #'s 10097715 and 10097717, which were assigned to their pumps. However, WO #'s 10091899 and 10091639 were also assigned for the vibration of the transmission of both units. The vibration for the transmission of unit # 1 was addressed on May 16, 2012 as documented on the Operator's Log Book. Discrepancies on WO # and dates were observed, since the previous inspection was conducted on May 17, 2012. In addition, there was no documentation on the Operator's Log Book o the vibration addressed for unit # 2.



Findings May 17, 2012 CEI	Findings November 15, 2012 RI
2) The screw conveyor was corroded. Form AAA-340-A # 15558 (WO 10075359) was completed on October 26, 2011.	Not corrected.
3) The collection bin for the screw conveyor was corroded.	Not corrected. It was also broken at some areas. Figure # 1 attached shows the collection bin for the screw conveyor.
4) There are three (3) blowers. Only one (1) blower is needed to provide aeration. Unit # 3 was in operation. Units # 1 and # 2 were in stand-by mode, but operable. Work Order # 10093591 was completed on March 27, 2012; their filters do not match.	Corrected and documented on the Operator's Log Book on July 10, 2012. But again, having another WO # (10096145).
5) The air piping of the activated sludge conventional package plant (Old Plant) had an air leak at one of its joints.	Not corrected.

B. The following table details the equipment that was out of service or in malfunction as listed in the AAA-48 Form at the time of the previous CEI conducted on May 7, 2012:

EQUIPMENT	DATE REPORTED	WORK ORDER #	TYPE OF FAILURE
1) Exterior illumination	August 14, 2011	15538 10069938	Light bulbs out of service
2) Poly Blend System	September 20, 2011	15549 10072295	Pending for PLC Programming
3) MCC BNR Room	March 6, 2012	10090165	Fuse out of service
4) Chlorine Contact Chamber's Drainage Valve	March 5, 2012	10088796	Broken drainage valve

During the RI, a follow up to the above-mentioned equipment was performed revealing the following information:

- 1) Exterior illumination – Corrected. It was documented on the Operator's Log Book on May 24, 2012.
- 2) Poly Blend System – Not corrected. Still pending for PLC's Programming.
- 3) MCC BNR Room - Corrected It was documented on the Operator's Log Book on June 30, 2012.
- 4) Chlorine Contact Chamber's Drainage Valve - Corrected. It was documented on the Operator's Log Book on September 8, 2012.

C. At the time of the RI, the operational status of the following equipment either out of service or in malfunction was listed in Form AAA-48 as follows:

- 1) Clarifier's Tank Building

EQUIPMENT/FAILURE	DATE REPORTED	WORK ORDER #
Spray Pump / Motor	August 22, 2012	10112744
Arm's Transmission / Motor	November 13, 2012	10130352

2) BNR Building – Sludge Belt Filter Press Unit

EQUIPMENT/FAILURE	DATE REPORTED	WORK ORDER #
Filter Press / Lights out of service	June 8, 2012	10100309
Control Panel for Sludge Pumps / Failure to operate in automatic mode	August 12, 2012	10110905

3) BNR Building – Blowers

EQUIPMENT/FAILURE	DATE REPORTED	WORK ORDER #
Blower # 2 - Motor / Squeaky noise	November 5, 2012	10128925

C. At the time of the RI, there were observed:

- 1) Judge Order Prohibiting Reprisals was placed in the bulletin board of the facility as required by the Court.
- 2) Housekeeping practices must be improved.
- 3) The hydraulic pump for the comminutor had a squeaky noise. Such equipment was not listed in the AAA-48 Form, and had no SAP #.
- 4) Activated Sludge Conventional Package Plant (Old Module):
  - i) Corrosion was observed at the old module.
  - ii) Scum was observed at the surface of the clarifier.
  - iii) Short-circuiting was observed at the "V-type" effluent weirs of the clarifier.
  - iv) Floatables, scum, and grease were observed at the clarifier's center well or inner baffle.
  - v) Solids accumulation was observed at the surface of the digester.
  - vi) The digester needs to be cleaned, as seen in Figure # 2 attached.
  - vii) Sludge bulking (old sludge) was observed at the surface of the chlorine contact chambers, as seen in Figures # 3 and # 4 attached.
- 5) The influent and effluent auto-samplers had no thermometers. At the time of the RI, there were two (2) COD samples stored on each auto-sampler. The total of four (4) COD samples had labels showing that were taken on November 14, 2012; which is the date before the RI. Figure # 5 attached shows a view of the effluent auto-sampler. The Operator's Log Book had a note written on such date indicating that the thermometers were taken out for calibration. This situation must be avoided at all times. Additional thermometers could be available at the plant in order to prevent this situation or the thermometers could be replaced by the laboratory personnel at the time of the sampling. Such samples (4 in total) are not representative samples since a calibrated thermometer was not in place recording adequate temperature within its normal range.

#### IV. EFFLUENT QUALITY

A grab sample of the effluent was taken by PRASA at the sampling point 001 for appearance purposes; revealing that it was not clear, had a turbid-like appearance, and had solids: (please indicate if present)

color – No.

grease – No.

oil sheen – No.

turbidity\* – Yes.

visible foam – No.

visible floatable solids – Yes.

other – N/A.

\* Based on observations, it's not a quantitative measure.

## **V. CONCLUSION**

Please note that Part C.5 of Attachment I of the permit requires the permittee to properly operate and maintain all facilities and systems for collection and treatment (and related appurtenances) which are installed or used to achieve compliance.

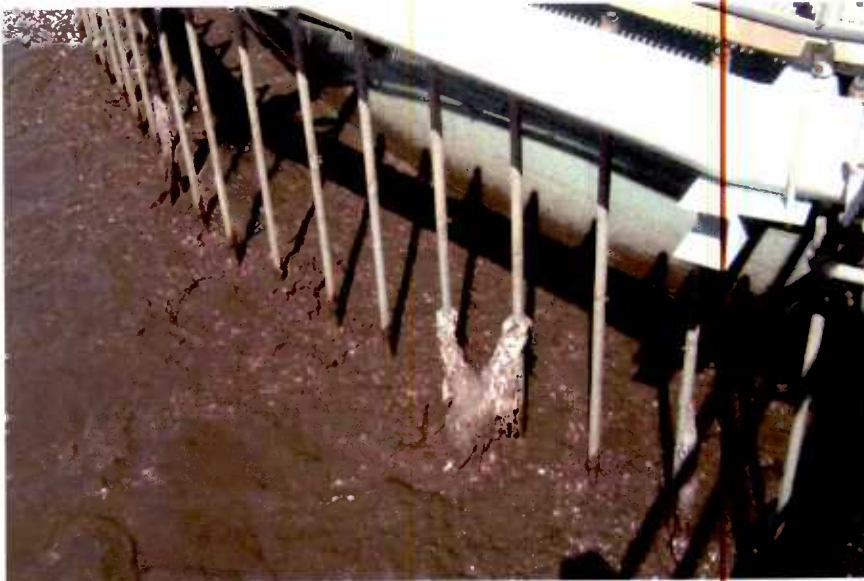


Guanica WWTP (RI)

November 15, 2012

Figure # 1

Collection bin for screw conveyor.



Guanica WWTP (RI)

November 15, 2012

Figure # 2

Digester.

Guanica WWTP (RI)

November 15, 2012

Figure # 3

Chlorine contact chamber.



Guanica WWTP (RI)

November 15, 2012

Figure # 4

Chlorine contact chamber.



Guanica WWTP (RI)

November 15, 2012

Figure # 5

Effluent auto-sampler.